

Notice of Allowability

Application No.

10/668,956

Examiner

Kishor Mayekar

Applicant(s)

LEHMANN ET AL.

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7 February 2005.
2. ☒ The allowed claim(s) is/are 1-8 and 11.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 09/03 & 02/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date Dec. 18, 2006
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Kishor Mayekar
Primary Examiner
Art Unit: 1753

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-11, drawn to an electrocoating process, classified in class 204, subclass 471.
 - II. Claim 12, drawn to a coated product, classified in class 428, subclass 622.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions of Groups II and I are related as process of making and product made.

The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a non-electrocoating process.

3. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

Art Unit: 1753

4. During a telephone conversation with Attorney H. Fricke on November 16, 2006 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-11. Affirmation of this election must be made by applicant in replying to this Office action. Claim 12 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Examiner's Amendment

6. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney H. Fricke on 18 December 2006.

The application has been amended as follows:

Art Unit: 1753

In the Claims:

Claim 1. (currently amended) 1. A process for the production of a CED (cathodic electrodeposition) coating with improved adhesion towards subsequent layers comprising the steps of

- a) ~~cathodic~~ cathodically electrodepositing a CED coating layer of a CED coating composition onto an electrically conductive substrate surface and
- b) ~~thermal~~ thermally curing the CED coating layer by baking in an indirectly heated circulating air oven operated with a proportion of fresh air in the circulating air of the oven of 0 to 20 vol.%,

wherein the CED coating composition used contains at least one water-soluble metal nitrate corresponding to a quantity of 1 to 10 mmol of nitrate per 100 g of resin solids content, wherein the metal is selected from the group consisting of metals of atomic numbers 20 to 83, with the exception of chromium, arsenic, rubidium, ruthenium, rhodium, palladium, cadmium, antimony, caesium, osmium, iridium, platinum, mercury, thallium and lead, and wherein the CED coating layer substrate surface is rinsed with ultrafiltrate obtained from the CED coating composition at least in an area visible to an observer and subsequently at most 50 area-% of the CED-coated coating layer substrate surface is ~~are~~ rinsed with water prior to thermal curing.

Claim 2. (original) The process of claim 1, wherein the metal nitrate is present in a proportion of 2 to 6 mmol of nitrate per 100 g of resin solids content of the CED coating composition.

Art Unit: 1753

Claim 3. (original) The process of claim 1, wherein the at least one metal nitrate is selected from the group consisting of the nitrates of titanium, vanadium, iron, zinc, yttrium, zirconium, tin, cerium, neodymium and bismuth.

Claim 4. (original) The process of claim 1, wherein, in addition to the at least one metal nitrate, the CED coating compositions contain at least one further metal compound other than the at least one metal nitrate, wherein the metals are present in these metal compounds with an oxidation number of +2 or above and not as a constituent of anions.

Claim 5. (original) The process of claim 4, wherein the at least one further metal compound comprises a compound selected from the group consisting of compounds of vanadium, iron, zinc, yttrium, zirconium, tin, cerium, neodymium or bismuth.

Claim 6. (original) The process of claim 4, wherein the total metal content arising from the contributions from metal nitrate and the at least one further metal compound amounts to 0.1 to 2 wt.% and wherein the sum of the contributions calculated as metal is in each case relative to the resin solids content of the CED coating composition.

Claim 7. (original) The process of claim 5, wherein the total metal content arising from the contributions from metal nitrate and the at least one further metal compound amounts to 0.1 to 2 wt.% and wherein the sum of the contributions calculated as metal is in each case relative to the resin solids content of the CED coating composition.

Claim 8. (currently amended) The process of claim 1, wherein the substrates comprise automotive bodies or automotive body parts.

Claim 9. (canceled)

Art Unit: 1753

Claim 10 (canceled)

Claim 11. (original) The process of claim 1, wherein at least one further coating layer is applied onto the baked CED coating layer.

Claim 12 (canceled)

7. The following is an examiner's statement of reasons for allowance: Because of the unexpected results as disclosed in Examples 5 through 7 from the use of the recited water-soluble metal nitrate, the recited thermal curing in an indirectly heated circulating air, and the recited rinsing of the CED coating layer substrate surface with ultrafiltrate and subsequently at most 50 are-% with water prior to the thermal curing.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

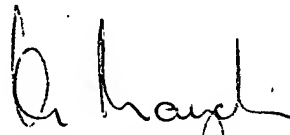
Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (571) 272-1339. The examiner can normally be reached on Monday-Thursday.

Art Unit: 1753

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kishor Mayekar
Primary Examiner
Art Unit 1753